

# **EXHIBIT 15**

# BROCADE TURBOIRON 24X SWITCH

## DATA CENTER

## A Powerful Top-of-Rack Switch for Data Center and High-Performance Computing

### HIGHLIGHTS

- A 1U, high-density top-of-rack data center switch for 10 GbE server access and aggregation with 24 10 GbE/1 GbE dual-speed ports and four 1 GbE ports
- Flexibility to mix 10 GbE and 1 GbE servers, protecting investments and streamlining migration to 10 GbE-capable server farms
- Wire-speed performance with an ultra-low-latency, cut-through, non-blocking architecture that is ideal for HPC environments
- Highly efficient power and cooling with front-to-back airflow, automatic fan speed adjustment, and use of SFP+ and direct attached SFP+ copper (Twinax)
- High availability with redundant, load-sharing, hot-swappable, auto-sensing/switching power supplies and triple-fan assembly
- End-to-end QoS with hardware-based marking, queuing, and congestion management
- Embedded per-port sFlow capabilities to support scalable hardware-based traffic monitoring

Today's data centers are expanding as demand for data and storage continues to grow exponentially. Moreover, requirements such as application convergence, non-stop operation, scalability, high availability, and power efficiency are placing even greater demands on the network infrastructure. To meet this challenge, today's data center network solutions must provide a broad set of capabilities—including higher levels of performance, reliability, security, and Quality of Service (QoS)—as well as low Total Cost of Ownership (TCO).

Specifically designed for data centers, the Brocade® TurboIron® 24X Switch is a compact, high-performance, high-availability, and high-density 10 Gigabit

Ethernet (GbE) solution that meets mission-critical data center and High-Performance Computing (HPC) requirements. With an ultra-low-latency, cut-through, non-blocking architecture, the Brocade TurboIron 24X provides a cost-effective solution for server or compute-node connectivity.

The TurboIron 24X can support 1 GbE servers until they are upgraded to 10 GbE-capable Network Interface Cards (NICs), simplifying migration to 10 GbE server farms. In addition, the TurboIron 24X can provide 10 GbE aggregation behind 1 GbE access switches. Either way, the TurboIron 24X is designed to save valuable rack space, power, and cooling in the data center while delivering 24×7 service through its high-availability design.



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### LEADING-EDGE FLEXIBILITY AND RELIABILITY

The Turbolron 24X provides a highly flexible data center solution that offers the highest levels of reliability.

#### Flexible Data Center Deployment and Future-Proofing

The Turbolron 24X is a high-density 10 GbE solution for direct server or compute-node connectivity in data center and HPC cluster environments. Each dual-speed port on the Turbolron 24X can function as a 1 GbE port by plugging in an SFP, making it a flexible solution for environments where some servers have not yet been upgraded to 10 GbE-capable NICs.

When organizations upgrade a server's NICs to 10 GbE, they only need to replace the SFP optics with SFP+ optics or direct attached SFP+ copper (Twinax). This approach protects Ethernet-based investments and streamlines migration to 10 GbE. In data center environments where all servers are 1 GbE-capable, organizations can deploy the Turbolron 24X as a compact and cost-effective 10 GbE aggregation switch—moving it to the front layer when servers are ready for the 10 GbE upgrade.

The Turbolron 24X also includes four 1 GbE copper RJ45 ports for server connectivity or separate management network connectivity.

The high density of dual-speed ports in a 1U space enables organizations to design highly flexible and cost-effective networks. In addition, organizations can utilize various combinations of short-range and long-range transceivers for a variety of connectivity options.

#### Increased Reliability through Redundancy and Intelligence

The Turbolron 24X includes internal power redundancy features, which are usually available only in a modular chassis form factor. Every Turbolron 24X has a single AC power supply, but organizations can add another AC power supply for 1+1 redundancy. The AC power supplies are hot-swappable and load-sharing with auto-sensing and auto-switching capabilities, which are critical for power redundancy and deployment flexibility (see Figure 1).

The hot-swappable power supplies and fan assembly enable organizations to replace components without service disruption. In addition, several high-availability and fault-detection features help in failover of critical data flows, enhancing overall system availability and reliability. Organizations can use Brocade IronView™ Network Manager (INM) and sFlow-based network monitoring and trending to proactively monitor risk areas and optimize network resources to avoid many network issues altogether.

### GREENER DATA CENTERS WITH LOWER TCO

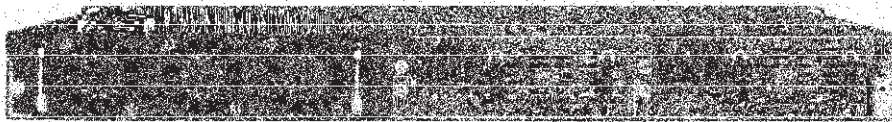
As application data and storage requirements continue to rise exponentially, demand for higher port density and bandwidth grows, as do the number of network devices and power consumption. Organizations looking to reduce TCO need solutions with higher scalability and density per rack unit that consume less power and dissipate less heat.

The Turbolron 24X addresses those needs with a state-of-the-art ASIC, front-to-back airflow, automatic fan speed control, and power-efficient optics to ensure the most efficient use of power and cooling. For low-cost, low-latency (0.25 µs), and low-energy-consuming (0.1 watts) cabling within and between the racks, the Turbolron 24X supports direct attached SFP+ copper (Twinax) cabling at up to 10 meters. For switch-to-switch connectivity, the Turbolron 24X supports low-power-consuming (1.0 watts) SFP+ optics at up to 300 meters. In high-port-density deployments, these features save significant operating costs.

#### SUPERIOR ROI AND INVESTMENT PROTECTION

The Turbolron 24X combines strategic performance, availability, and scalability advantages with investment protection for existing LAN environments. It utilizes the same Brocade IronWare™ operating system used by other Brocade Ethernet/IP products. This helps ensure full forward and backward compatibility among the product family while simplifying software maintenance and field upgrades.

Moreover, the use of the same industry-standard CLI eliminates the need for staff retraining. As a result, the Turbolron 24X enables organizations to better leverage their current training, tools, devices, and processes.



**Figure 1.**

The Turbolron 24X features hot-swappable power supplies and a triple-fan unit.